

# SAFETY DATA SHEET

## Korsolex prêt-à-l'emploi / ready to use

Version 1.5      Revision Date: 05.09.2019      SDS Number: R11233      Date of last issue: 27.05.2019  
Date of first issue: 01.07.2014

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Korsolex prêt-à-l'emploi / ready to use  
Product code : R11233

#### Manufacturer or supplier's details

Manufacturer : BODE Chemie GmbH  
Melanchthonstraße 27  
22525 Hamburg  
Tel.: +49 (0)40 / 54 00 60

Supplier :

Responsible Department : Scientific Affairs  
kundenservice-SIDA@bode-chemie.de

Emergency telephone number : Giftnotruf Göttingen  
24h-Phone +49 (0)551 / 1 92 40

#### Recommended use of the chemical and restrictions on use

Recommended use : In-door use  
Disinfectants and general biocidal products  
For further information, refer to the product technical data sheet.

Restrictions on use : Restricted to professional users.

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin corrosion/irritation : Category 2  
Serious eye damage/eye irritation : Category 1  
Respiratory sensitisation : Category 1  
Skin sensitisation : Category 1  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

#### GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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Precautionary statements : **Prevention:**  
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P280 Wear protective gloves/ eye protection/ face protection.  
 P284 Wear respiratory protection.

**Response:**  
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Disposal:**  
 P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

Chemical name	CAS-No.	Concentration (% w/w)
ethylene glycol	107-21-1	>= 1 - < 10
Glutaral	111-30-8	>= 1 - < 2,5

**4. FIRST AID MEASURES**

General advice : Call a physician immediately.

If inhaled : Move to fresh air.

In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off immediately with soap and plenty of water.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If swallowed : Do NOT induce vomiting.  
Rinse mouth.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : Keep under medical supervision for at least 48 hours.  
For specialist advice physicians should contact the Poisons Information Service.

**5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray jet  
Dry powder  
Carbon dioxide (CO<sub>2</sub>)  
Foam

Unsuitable extinguishing media : none

Hazardous combustion products : No hazardous combustion products are known

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- Specific extinguishing methods : Standard procedure for chemical fires.
- Special protective equipment for firefighters : Use personal protective equipment.  
In the event of fire, wear self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : No special protective measures against fire required.
- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
- Conditions for safe storage : Store at room temperature in the original container.  
Keep tightly closed.
- Materials to avoid : Keep away from food and drink.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethylene glycol	107-21-1	TWA (Vapour)	25 ppm	ACGIH
		STEL (Vapour)	50 ppm	ACGIH
		STEL (Inhalable fraction, Aerosol only)	10 mg/m <sup>3</sup>	ACGIH

**Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.  
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).  
Respirator with filter for organic vapour

Hand protectionIn case of full contact: Nitrile rubber

- Material : Protective gloves complying with EN 374.
- Break through time : > 480 min
- Glove thickness : 0,1 mm
- Protective index : Class 6  
: peha-soft nitrile guard

Remarks : In case of full contact: Nitrile rubber

- Eye protection : Tightly fitting safety goggles

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Skin and body protection	:	Work uniform or laboratory coat. Remove and wash contaminated clothing before re-use. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Ensure that eye flushing systems and safety showers are located close to the working place.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Keep away from food and drink. Avoid contact with the skin and the eyes.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	light yellow
Odour	:	characteristic
pH	:	4,5 (20 °C)
Melting point/range	:	not determined
Boiling point/boiling range	:	100 °C
Flash point	:	Not applicable
Flammability (solid, gas)	:	not auto-flammable
Vapour pressure	:	No data available
Density	:	1,0 g/cm <sup>3</sup> (20 °C)
Solubility(ies) Water solubility	:	completely miscible
Conductivity	:	No data available

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### 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	None reasonably foreseeable.
Conditions to avoid	:	Heat Strong sunlight for prolonged periods.
Incompatible materials	:	None.

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### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### **Product:**

Acute oral toxicity	:	Acute toxicity estimate: 4.643 mg/kg Method: Calculation method
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Acute inhalation toxicity : Acute toxicity estimate: > 10 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method

**Components:**

**ethylene glycol** (CAS: 107-21-1):

Acute dermal toxicity : LD50 Dermal (Rabbit): 9.250 mg/kg

**Glutaral** (CAS: 111-30-8):

Acute inhalation toxicity : LC50 (Rat, female): 0,28 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: Corrosive to the respiratory tract.

**Skin corrosion/irritation****Product:**

Species: Rabbit  
Result: irritating

**Components:**

**ethylene glycol** (CAS: 107-21-1):

Result: No skin irritation

**Glutaral** (CAS: 111-30-8):

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: Corrosive

**Serious eye damage/eye irritation****Product:**

Species: Rabbit  
Result: Risk of serious damage to eyes.

**Respiratory or skin sensitisation****Product:**

Remarks: May cause sensitisation by inhalation and skin contact.

**Components:**

**Glutaral** (CAS: 111-30-8):

Species: Guinea pig  
Result: The product is a skin sensitiser, sub-category 1A.

Result: May cause sensitisation by inhalation.

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Korsolex prêt-à-l'emploi / ready to use****STOT - single exposure****Product:**

Assessment: May cause respiratory irritation.

**Components:**

**Glutaral** (CAS: 111-30-8):

Assessment: May cause respiratory irritation.

**STOT - repeated exposure****Components:**

**ethylene glycol** (CAS: 107-21-1):

Assessment: May cause damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity**

No data available

**Aspiration toxicity**

No data available

**Experience with human exposure**

No data available

**Toxicology, Metabolism, Distribution**

No data available

**Neurological effects**

No data available

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:**

**ethylene glycol** (CAS: 107-21-1):

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 10.000 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 41.100 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 ( Scenedesmus capricornutum (fresh water algae)): > 10.000 mg/l  
Exposure time: 72 h

**Glutaral** (CAS: 111-30-8):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,8 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,1 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 ( Desmodesmus subspicatus (green algae)): 0,6 mg/l  
Exposure time: 72 h

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Test Type: static test  
Method: OECD Test Guideline 201

NOEC ( Desmodesmus subspicatus (green algae)): 0,025 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 1,6 mg/l  
Exposure time: 97 d  
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 5 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

### Persistence and degradability

#### Components:

**Glutaral** (CAS: 111-30-8):

Biodegradability : Remarks: Readily biodegradable, according to appropriate OECD test.

Biochemical Oxygen Demand (BOD) : Biochemical oxygen demand  
235 mg/g  
Incubation time: 5 d

Chemical Oxygen Demand (COD) : 1.385 mg/g

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.  
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Empty remaining contents.  
Store containers and offer for recycling of material when in accordance with the local regulations.

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## 14. TRANSPORT INFORMATION

### ADR

Not regulated as a dangerous good

### UNRTDG

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### IATA-DGR

Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

## 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

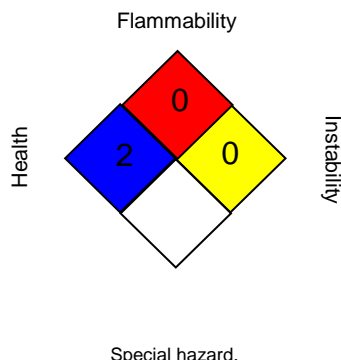
## 16. OTHER INFORMATION

### Safety datasheet sections which have been updated:

2. Hazards identification

### Further information

#### NFPA:



#### HMIS® IV:

HEALTH		2
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / STEL : Short-term exposure limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test



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population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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